ABSTRACT

An apparatus and method for detecting and suppressing corrupted data frames transported from a SONET network to a receiver utilizing the SOF frame indicator to manage the buffer-to-buffer credit count. By verifying the integrity of the SOF frame indicator prior to forwarding it to the client receiver the apparatus and method ensure that the buffer-to-buffer credit count integrity is maintained while avoiding the introduction of latency. A frame de-encapsulation component produces data frames compatible with the receiver from SONET frames input thereto and outputs the receiver-compatible data frames. An idle frame signal generator generates idle frame signals. A Start of Frame (SOF) indicator detector detects a Start of Frame indicator in each data frame output from the frame de-encapsulation component, determines whether the Start of Frame indicator is valid or corrupted and produces an output signal indicative of that determination. A multiplexer selects, for output to the receiver, one of a first and a second signal input thereto on the basis of the output signal produced by the Start of Frame (SOF) indicator detector, the first input signal being a current data frame and the second input signal being an idle frame signal, whereby the first input signal is selected when the output signal produced by the Start of Frame (SOF) indicator detector indicates that the Start of Frame indicator is valid and the second input signal is selected when the output signal produced by the Start of Frame (SOF) indicator detector indicates that the Start of Frame indicator is corrupted.